Safer Drinking Water for Homes on a Rugged Idaho Lake Shore

Installing a water transmission line along the steep, rocky edge of Lake Pend Oreille

Lake Pend Oreille is a very deep glacier-carved lake with a rugged shoreline. On the lake's rocky Cape Horn peninsula, the Cape Horn Water Users Association, Cape Horn Estates Water Association, and Pend Oreille Pines Water Association were all getting their drinking water from the lake when they found out they would soon have to start filtering the water because of new drinking water regulations.

Individually, they each began investigating ways to add filtration systems. They also investigated a single filtration system to serve all three water systems. Both alternatives appeared technically feasible, but as they investigated, it became very clear that there had been a dramatic increase in the expense and difficulty of operating a water system whose source is surface water. It was also clear that the expense and difficulty would only increase in the future. The possibility of just "getting out of the water business" started looking like the best option. One of the associations asked the Idaho Department of Environmental Quality to approach nearby Bayview Water and Sewer District and find out whether it would be willing to annex all three small systems. Although it wasn't unanimous, several Bayview board members supported the idea, especially Chairman Chuck Waller. The three associations commissioned a preliminary engineering study. The study found combining all three with the Bayview system to be technically and financially feasible.

Support for the consolidation project was not unanimous or steady. Some of the Bayview board members opposed it, especially when the estimated cost more than doubled, from $800,000 to $2 million. The initial underestimate was partly due to the difficulty of estimating costs of delivering water to such a remote and rugged place. Additional opposition came from some property owners who did not want their systems annexed by Bayview because their water assessments would increase. In particular, owners of undeveloped lots were not eager to pay more when they weren't using any water yet. In public meetings held by the Bayview Water and Sewer District, supporters and opponents discussed the value of a better water system that would serve the needs of these communities now and in the future.

Chuck Waller and Ellery Howard in front of one of the new booster pumping stations

The project planning and design continued, with Chairman Chuck Waller crediting the dedication of the project engineer, Ellery Howard of J-U-B Engineers, Inc., for much of the progress. Construction is now under way and the project will be completed in the fall of 2002.

The $2 million project cost covered engineering, legal fees (mostly to secure easements), and construction. Previously existing individual service connections will still be used but with new meters at each connection. There will be a new central reservoir, fed by a new 8-inch water transmission line, which is now being constructed and anchored underwater to the rocky, steep lake bottom. About 90% of the costs were covered with a loan from the DEQ-administered Drinking Water State Revolving Fund, and about 10% with federal grants. Because the consolidation project included the valuable benefits of consolidating multiple systems and of bringing systems that rely on surface water into regulatory compliance, the loan was offered with very favorable terms. When DEQ Director Steve Allred agreed to drop the interest rate from the customary 4% to 2%, Bayview agreed to take the loan and complete the consolidation. The drinking water and engineering staff in the DEQ Coeur d'Alene Regional Office was instrumental in finding these financial resources and providing assistance with the applications. This assistance was greatly appreciated because qualifying for a loan from the revolving fund requires a great deal of paperwork. Some would-be applicants have given up rather than find their way through what seems like a red tape maze. The DEQ staff also provided technical assistance throughout the project, and supported it with information both during and outside of public meetings.

Of the many, many people who deserve credit for spending a great deal of time and effort on this project, Chuck Waller stands out. When the going got tough and others wanted to drop the project, Chuck put in an enormous effort. He continued to back the project in the face of opposition from his own board, from resident customers who were his neighbors, and from others in the area. He conducted many public meetings and spent considerable time discussing the project with community residents, in an effort to present the facts and keep the project from failing. He stood steadfast in his belief that this was the right thing for Bayview to do for its neighbors in need, and he would not give up on it.

When the new transmission line is connected, the Bayview Water and Sewer District will serve an additional 300 connections, delivering clean, safe drinking water to homes on the rugged Cape Horn peninsula.

The new water transmission line from Bayview Water and Sewer District to Cape Horn peninsula appears to lay on the lake surface, just before being anchored to the pilings near the shore.